

## SCIENTIFIC NOTE

**ATTENDANCE OF *AETALION RETICULATUM*  
(HEMIPTERA: AETALIONIDAE)  
BY *POLISTES ERYTHROCEPHALUS*  
(HYMENOPTERA: VESPIDAE) IN PERU<sup>1</sup>**M. A. MacCarroll<sup>2</sup> and W. K. Reeves<sup>3</sup>

Homopteran honeydew is a carbohydrate food source for Hymenoptera and Diptera in the Neotropics (Letourneau and Choe 1987, Cameron et al 1995). Honeydew contains a mixture of oligosaccharides including melezitose and stachylose (Russell and Hunter, 2002) and might be a higher energy food source than floral nectar. The quality of food is important in determining caste in social Hymenoptera (O'Donnell 1998). In certain Diptera, such as sand flies (Psychodidae: Phlebotominae), the composition of the sugar might affect the development of medically important trypanosomatids (*Leishmania*) in the gut (Cameron et al. 1995).

*Polistes erythrocephalus* Latreille (Hymenoptera: Vespidae) was not known to tend or collect honeydew from aetalionids. On March 23, 2004, at 1243h, we observed four aggregations of *Aetalion reticulatum* (L.) (Hemiptera: Aetalionidae) feeding on a tree, most likely Solanaceae, in Agua Caliente, Department of Cusco, Peru. Each aggregation consisted of approximately 30-40 individuals, including nymphs, and adult males and females. A single female *P. erythrocephalus* was standing among or below each of the aggregations of *A. reticulatum*. *Polistes erythrocephalus* touched individuals of *A. reticulatum* with their antennae but the homopterans did not directly feed the wasps honeydew. Honeydew accumulated below the aggregations of *A. reticulatum*, and *P. erythrocephalus* gleaned the honeydew from the branch directly below the homopteran aggregation (Figure 1). We collected and tasted the honeydew from the branch to verify that it was honeydew and not rain water. When *P. erythrocephalus* was collected, it regurgitated a drop of honeydew from its mouth. This is the first account of *P. erythrocephalus* tending *A. reticulatum* and is further evidence that this homopteran is tended by wasps throughout its range. *Aetalion reticulatum* ranges from Mexico to Brazil and is tended by vespids in Costa Rica (Letourneau and Choe 1987). Voucher specimens of *P. erythrocephalus* and *A. reticulatum* are deposited in the American Museum of Natural History (Division of Invertebrate Zoology) and in the Clemson University Arthropod Collection.

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Figure 1. *Polistes erythrocephalus* feeding on honeydew below an aggregation of *Aetalion reticulatum* in Agua Caliente, Department of Cusco, Peru, March 23, 2004.

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